(to Examiner's Amendment)

Docket No. 740756-2045

Serial No. 09/412.510

IN THE SPECIFICATION:

Please replace the paragraph spanning pages 9-10 with the following amended paragraph:

The high density plasma region has an intimate relation with a local pressure in the vicinity of gas exhaust nozzle. Therefore, the length of the high density plasma region can be adjusted through variation of the gas flow velocity by adjustment of the gas flow rate. By this, the substrate surface can be in contact with and not in contact with the high density plasma region even if the distance between the substrate and the plasma generation apparatus is not varied. Of course, this is possible also in the case where the distance between the substrate and the plasma generation apparatus is varied. In the case where the substrate is in contact with the high density plasma region, the plasma treatment can be effected at a high speed, however, the substrate receives a damage. In the case where the substrate is not in contact with the high density plasma region, the substrate is free from bombardment thereto by an ion, and only neutral active species contributes contribute to reaction, resulting in no damage to the substrate. But reaction speed and a quality of the product after the reaction is not so good only by the neutral active species if the plasma treatment is carried out at room temperature. In this case, heating from room temperature to 300 ° C is necessary.

Please replace the paragraph spanning pages 13-14 with the following amended paragraph:

The apparatus for use in the process for depositing a DLC film according to the present invention comprises special devices for use in the steps of transporting the substrates and in the supply of high frequency power, because substrates 104 are placed on one side of an electrode 102 for supplying high frequency power. The electrode 102 for supplying high frequency power is placed at a distance of 1 cm from a ground electrode 103, and the both are placed inside a vacuum vessel 101. The electrode 102 for supplying high frequency power also functions as a substrate holder to support the substrates, for instance, in this example, 12 pieces of 3.5-inch magnetic diskettes are used as the substrates having thereon a magnetic layer. The transport system comprises components such as rails, racks, and pinions, which are made of insulators. Thus, they are DC-insulated and are arranged in a floating structure.

Please replace the third paragraph on page 14 with the following paragraph:

In the structure described above, the starting material, i.e., dimethylsilane $(Si(CH_3)_2H_2)$ as the carbon source, is introduced from a material supply system 106 at a flow rate of 20 SCCM (standard cubic centimeters per minute) to set the operation pressure to 1 Torr, while evacuating an evacuation system 108.

Please replace the paragraph spanning pages 15-16 with the following amended paragraph (note that changes are not shown because the USPTO scanned version mentioned on page 4 of the action is not available to Applicants on PAIRS, and it is not clear from the action which letters generally mentioned in the Office Action are missing from this scanned document):

A DLC film is deposited in the same manner as described in Example 1, except for using monomethylsilane ($Si(CH_3)H_3$) in the place of dimethylsilane ($Si(CH_3)_2H_2$).

Please replace the paragraph spanning pages 16-17 with the following amended paragraph (note that changes are not shown because the USPTO scanned version mentioned on page 4 of the action is not available to Applicants on PAIRS, and it is not clear from the action which letters generally mentioned in the Office Action are missing from this scanned document):

In the present Example, a Co-Cr-Ni alloy is used as the evaporation source. Furthermore, a pierce-type electron gun capable of scanning over a wide area is operated at an accelerating voltage of 35 kV under an operation pressure of 5 x 10⁻⁴ Torr to deposit a film by electron beam vacuum deposition process. The rate of transferring the polymer substrate material 3 is fixed to 135 m/min. A shield plate 5 is provided for confining the area of firm deposition.

Mark



